

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

LISTING OF CLAIMS:

1. – 4. (Canceled)

5. (Currently Amended) A terminal device, comprising:

a processor configured to download and store an application program in response to receipt of a user command;

the processor further configured to execute an operating system and execute a runtime environment, the runtime environment controlled with the operating system to manage the application program;

the processor further configured to execute the application program by interpretation of the application program with the runtime environment;

the processor further configured to detect one of a predetermined set of events that cause operation of the application program to suspend;

the processor further configured operable to execute the operating system to generate event data indicative of a cause of the suspension of the application program;

the processor further configured to suspend operation of the application program in response to detection of the one of the predetermined set of events operable within the operating system when an event is detected; and

means for storing a plurality of event data indications;

wherein the processor is further configured to resume operation of the application program suspended by the processor, and the event data indications each represent respective events between a start of suspension of operation of the application program and resumption of operation of the application program at an end of the suspension; and

the processor is further configured to execute the operating system to deliver at least one of the stored event data indications to the resumed application program, wherein operation of the resumed application program is configured to adjust in accordance with the at least one of the event data indications to be responsive to the cause of the suspension.

6. (Canceled)

7. (Previously Presented) The terminal device of Claim 5, further comprising means for communicating via a communication network, and wherein:

the processor is further configured to suspend operation of the application program when the means for communicating receives a message designating a user of the terminal device.

8. (Currently Amended) A program product useable with a computer device comprising:

a computer readable medium encoded with a computer program that is executable by a processor to cause:

download and storage in memory of an application program;

operation of an operating system and execution of a runtime environment controlled by the operating system;

interpretation and execution of the application program with the runtime environment to manage the application program via the operating system;

detection[[g]] of one of a predetermined set of events that cause operation of the[[an]] application program ~~operable within the operating system to suspend;~~

suspension of[[ding]] operation of the application program when an event is detected that is in the predetermined set of events;

generation[[g]] of event data with the operating system, the event data indicative of a cause of suspension of the application program;

storage of[[ing]] a plurality of event data indications;

resumption of[[ing]] operation of the application program that was suspended, wherein the event data indications each represent respective events between a start of suspension of operation of the application program and an end of suspension when operation of the application program is resumed;

delivery of[[ing]] at least one of the event data indications to the resumed application program with the operating system; and

the resumed application executable with the runtime environment to
adjust~~[[ing]]~~ further operation of the resumed application program in accordance
with the at least one of the received event data indications to be responsive to the
cause of the suspension.

9. (Currently Amended) A terminal device comprising:

a memory;

instructions stored in the memory to call a runtime environment with an
operating system included in the terminal device;

instructions stored in the memory to interpret and execute an application
with the runtime environment under control of the operating system;

instructions stored in the memory to detect receipt of a first predetermined
event;

instructions stored in the memory to call the runtime environment to
suspend operation of ~~the~~~~[[an]]~~ application that is currently being executed;

instructions stored in the memory to store event data indicating the cause of
suspension of the application;

instructions stored in the memory to initiate resumption of execution of the
application in response to a second predetermined event;

instructions stored in the memory to extract the stored event data;

instructions stored in the memory to call the runtime environment to resume
execution of the application;

instructions stored in the memory to provide the extracted stored event data to the resumed application, wherein the application is resumed in accordance with the extracted event data; and

instructions stored in the memory to generate a message originated from the resumed application that notifies a user of the first predetermined event.

10. - 11. (Canceled)

12. (Previously Presented) The terminal device of claim 9, wherein instructions stored in the memory to generate a message comprises instructions stored in memory to generate a query to a user that is related to the first predetermined event.

13. (Previously Presented) The terminal device of claim 9, wherein the application is a first application, and instructions stored in the memory to generate a message comprises instructions stored in memory to generate a query to a user to launch a second application to attend to the first predetermined event.

14. (Previously Presented) The terminal device as in claims 12 or 13, wherein the message comprises an audio message.

15. (Previously Presented) The terminal device as in claims 12 or 13, wherein the message comprises a text message.

16. (Previously Presented) The terminal device of claim 9, wherein the first predetermined event comprises receipt by the terminal device of an email or a call request.

17. (Previously Presented) The terminal device of claim 9, wherein the first predetermined event comprises receipt or transmission by the terminal device of data via a short range transmission comprising Bluetooth transmission or infrared transmission.

18. (Currently Amended) The terminal device of claim 9, wherein the application is a first application, and the first predetermined event comprises execution of a second application by the first application, and the terminal device further comprises instructions stored in the memory to call the runtime environment to suspend operation of the first application when execution of the second application occurs.

19. (Currently Amended) The terminal device of claim 9, further comprising instructions stored in the memory for the operating system to store event data for events that occur while the application is suspended, and instructions stored in the memory for the operating system to provide notification of the events that occur while the application is suspended, when execution of the application is resumed.

20. (Previously Presented) The terminal device of claim 9, wherein the second predetermined event comprises a user command.

21. (Previously Presented) The terminal device of claim 9, wherein the second predetermined event comprises expiration of a determined time period.

22. (Previously Presented) The terminal device of claim 9, wherein the second predetermined event comprises completion of the first predetermined event.

23. (Previously Presented) The terminal device of claim 9, wherein instructions stored in memory to suspend the application comprises instructions stored in the memory to, during the suspension, maintain application related data in volatile memory that was input by a user prior to the suspension.

24. (Previously Presented) The terminal device of claim 9, wherein instructions stored in memory to suspend the application comprises instructions stored in memory to maintain the suspended application in volatile memory during the suspension.

25. (Currently Amended) The terminal device of claim 9, wherein instructions stored in memory to store event data comprises instructions stored in memory for the operating system to set an event flag indicative of the first predetermined event.

26. (Currently Amended) The terminal device of claim 9, wherein instructions stored in memory to store event data comprises instructions stored in memory for the operating system to store an indicator of the first predetermined event and an identifier of the suspended application in a table.

27. (Previously Presented) The terminal device of claim 9, further comprising instructions stored in memory to store the application in volatile memory when the application is launched, and instructions stored in memory to suspend the application comprises instructions stored in memory to maintain the application in the volatile memory until execution is resumed.

28. (Previously Presented) The terminal device of claim 9, further comprising instructions stored in memory to delete the stored event data when execution of the application is resumed.

29. (Previously Presented) The terminal device of claim 5, further comprising display means for displaying information to a user, the display means operable to display a message related to the cause of the suspension, the resumed application program operable to generate the message in response to receipt of the delivered stored event data.

30. (Previously Presented) The terminal device of Claim 5, wherein the processor is further configured to maintain as unchanged data input by a user and

temporarily stored in the terminal device during operation of the application program.

31. (Previously Presented) The terminal device of Claim 5, wherein the resumed application program is configured to generate a message to notify a user of the cause of the suspension based on the stored event data.

32. (Previously Presented) The terminal device of Claim 5, wherein the predetermined set of events comprising receipt of an email or a voice call request.

33. (Previously Presented) The terminal device of Claim 32, where in response to the event being receipt of an email message, the processor is further configured to resume operation of the suspended application program after a specified time has elapsed following display of the message.

34. (Currently Amended) The terminal device of Claim 32, wherein the processor is further configured to generate different[[ee]] messages that originate from the resumed application program dependent on the cause of the suspension.

35. (Previously Presented) The terminal device of Claim 5, wherein the data related to the application program that is input by the user remains in random access memory after operation of the application program is suspended.

36. (Previously Presented) The terminal device of Claim 5, wherein the storage means comprises an interrupt table that identifies the event data and the application program interrupted thereby.

37. (Currently Amended) The program product of Claim 8, further comprising the operating system maintaining as unchanged data input by a user and temporarily stored in the terminal device during operation of the application program.

38. (Previously Presented) The program product of Claim 8, wherein the predetermined set of events comprise receipt of an email or a voice call request.

39. (Previously Presented) The terminal device of Claim 9, wherein instructions stored in the memory to store event data indicating the cause of suspension of the application further comprise instructions stored in the memory to maintain as unchanged data input by a user and temporarily stored in the memory during operation of the application.

40. (Currently Amended) A terminal device comprising:

a memory;

instructions stored in the memory to interpret and execute an

application with a runtime environment under control of an operating system;

instructions stored in the memory to detect receipt of a first predetermined event;

instructions stored in the memory to call the runtime environment to suspend operation of the application that is currently being executed;

instructions stored in the memory for the operating system to store event data related to suspension of the application that comprises instructions stored in the memory to set an event flag indicative of the first predetermined event;

instructions stored in the memory to initiate resumption of execution of the application in response to a second predetermined event;

instructions stored in the memory for the operating system to extract the stored event data;

instructions stored in the memory to call the runtime environment to resume execution of the application, in accordance with the extracted event data; and
instructions stored in the memory to generate with the resumed application any one of a plurality of different screens for display to a user that correspond to the extracted event data to notify the user of the first predetermined event.

41. (Currently Amended) A terminal device comprising:

a memory;

instructions stored in the memory to control execution of a runtime environment with an operating system included in the terminal device;

instructions stored in the memory to detect receipt of a first predetermined event;

instructions stored in the memory to use the runtime environment to suspend operation of an application that is currently being executed;

instructions stored in the memory for the operating system to store event data ~~related to suspension of the application that comprises instructions stored in memory to store~~ in a table, a predetermined indicator of the first predetermined event in association with an identifier of the suspended application ~~in a table~~;

instructions stored in the memory for the operating system to call the runtime environment to initiate resumption of execution of the application in response to a second predetermined event;

instructions stored in the memory to extract the stored event data and deliver the predetermined indicator to the resumed application;

instructions stored in the memory to use the runtime environment to resume execution of the application, in accordance with an interpretation by the resumed application of the predetermined indicator; and

instructions stored in the memory to use the runtime environment to generate a message originated from the resumed application that notifies a user of the first predetermined event based on the interpretation by the resumed application of the predetermined indicator.

42. (Currently Amended) A terminal device comprising:

a memory;

instructions stored in the memory to download and store an application in response to a user command;

instructions stored in the memory to control a runtime environment with an operating system included in the terminal device;

instructions stored in the memory to interpret and execute the application with the runtime environment under control of the operating system;

instructions stored in the memory to detect receipt of a first predetermined event;

instructions stored in the memory to control the runtime environment with the operating system to suspend operation of the application that is currently being executed;

instructions stored in the memory to store event data related to suspension of the application, the event data comprising an identifier of the suspended application;

instructions stored in the memory to initiate resumption of execution of the application with the operating system in response to a second predetermined event;

instructions stored in the memory for the operating system to extract the stored event data;

instructions stored in the memory to control the runtime environment with the operating system to resume execution of the application, the resumption of execution of the application based on the extracted event data; and

instructions stored in the memory to generate a message originated from the resumed application in response to the extracted event data, wherein the message is configured to notify a user of the first predetermined event.